# **Fact Sheet**



# For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05700008-2013**Application Received: **February 27, 2012**Plant Identification Number: **03-054-057-00008** 

Permittee: Luke Paper Company
Facility Name: West Virginia Operations
Mailing Address: 300 Pratt Street, Luke, MD 21540

Revised: N/A

Physical Location: Beryl, Mineral County, West Virginia

UTM Coordinates: 667.00 km Easting • 4,371.00 km Northing • Zone 17

Directions: From U.S. Interstate 68, at Frostburg, MD take MD Route 36 South to

Westernport, MD. Turn right onto MD Route 135 at Westernport and travel approximately 1.7 miles. Turn left onto the Potomac River Bridge, which becomes WV Route 46. Travel approximately 150 yards and

facility is on left side of State Route 46.

# **Facility Description**

Lime kiln and woodyard which supply supporting operations for pulp and paper mill. SIC Codes: 2621; 3274.

## **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]				
Regulated Pollutants	Po	Potential Emissions		
	Gas-fired	Oil-fired <sup>2,3</sup>	Petcoke	Emissions <sup>1</sup>
Carbon Monoxide (CO)	47.12	38.55	52.78	2.747 <sup>6</sup>
Nitrogen Oxides (NO <sub>X</sub> )	120.59	84.46	156.49	77.131
Particulate Matter (PM <sub>10</sub> )	649.9	649.9	651.57	Unavailable <sup>7</sup>
Total Particulate Matter (TSP)	803.58	803.58	805.26	139.941 8
Sulfur Dioxide (SO <sub>2</sub> )	0.48	0.26	4.29	1.871
Volatile Organic Compounds (VOC)	18.12	15.28	18.12	15.0782 9
Hazardous Air Pollutants <sup>4</sup>	Po	Potential Emissions		2011 Actual Emissions
Acetaldehyde	2.51	2.51	2.09	1.7617
Carbon Tetrachloride	8.57	8.57	8.56	Unavailable <sup>7</sup>
Hydrochloric acid	0.13	0.1346	3.36	0.2152
Methanol	38.18	38.18	38.18	11.9899
Phenol	1.46	1.46	1.46	0.6182
Aggregate HAPs <sup>5</sup>	54.63	55.28	54.66	16.82

- Actual emissions are from the 2012 Certified Emissions Statement (CES) Invoice, and represent emissions from January 1, 2011 through December 31, 2011.
- In particular, the Oil-fired scenario is combusting #2 / #6 fuel oil.
- Potential emissions for combusting recycled #4 fuel oil are the same as #2/#6 fuel oil fired emissions, except that SO<sub>2</sub> emissions are 0.48 tpy instead of 0.26 tpy.
- <sup>4</sup> There are other HAPs listed in the application, each of them with potential emissions less than 1.0 tpy.
- Aggregate potential and actual HAPs were determined by summing the speciated HAPs listed in the renewal application and 2012 CES, respectively.
- The 2012 CES listed 91.509 tons of CO. However, in 8/16/2012 technical correspondence, the permittee stated that this was based on using an incorrect factor. A factor of 2.0 lb/ton of CaO was used instead of 0.055 lb/ton for the mean (NCASI Bulletin No. 884 Table 4.13). The correct actual CES invoice emissions for CO should have been 2.747 tons.
- Actual emissions for these pollutants were not listed in the 2012 CES.
- TSP actual emissions include 0.0471 tons of PM-HAPs.
- The 2012 CES listed 28.753 tons of VOCs. However, in 8/16/2012 technical correspondence, the permittee stated that it discovered that the factor for Causticizers and Slakers was being applied incorrectly. The correct actual CES invoice emissions for VOC should have been 15.0782 tons.

# **Title V Program Applicability Basis**

This facility has the potential to emit 156.49 tpy of NOx; 651.57 tpy of  $PM_{10}$ ; 38.18 tpy of methanol; and 55.28 tpy of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Luke Paper Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules. This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air
		Pollution from Combustion of Fuel in
		Indirect Heat Exchangers.
	45CSR6	Open burning prohibited.
	45CSR7	To Prevent and Control Particulate Air
		Pollution from Manufacturing Process
		Operations
	45CSR10	To Prevent and Control Air Pollution From
		the Emission of Sulfur Oxides.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification,
		Relocation, and Operation of Stationary
		Sources of Air Pollutants
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart MM	Pulp Mills MACT
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 64	Compliance Assurance Monitoring (CAM)
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-0511C	June 17, 2009	PD97-122, PD07-017

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

In the following discussion, the term "current permit" means Title V permit R30-05700008-2007 (MM01), unless otherwise noted or determined from the context.

I. **45CSR7** – *To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations*. Current permit condition 4.1.6. gives a PM limit of 6.83 lb/hr for 031 and 036. However, the fact sheet for the 2007 renewal permit listed the limit as 6.73 lb/hr based upon throughput of 32,500 lb/hr for a Type "d" process. The correct linearly interpolated limit is 6.73 lb/hr; therefore, the correction is made in the renewal permit.

There are sources subject to the opacity limits in conditions 4.1.1. and 4.1.2. that are not subject to the mass rate requirements of condition 4.1.6. Such sources are material handling, preparation, storage, and other sources of fugitive particulate matter already subject to condition 4.1.8. Further, this rule does not apply to 045, 046, 047, and 048 because they are not the *last* operation in a manufacturing process preceding the emission of air contaminants, as these terms are defined in 45CSR§§7-2.20 and 2.38. Also, the Silo Vent 2E and Densi Filter 3E in condition 4.1.16. are not subject to 45CSR§7-4.1. since they are not source operations, as the term is defined in the rule. Therefore, there is no streamlining note for 2E and 3E in permit condition 4.1.16.

The language "45CSR§§7A-2.1.a.,b." is changed to "45CSR§§7A-2.1.a. and b." in conditions 4.2.2.a. and 4.2.2.b., as well as in the citation of authority.

- II. **45CSR13, Permit R13-0511C**. This underlying permit is included in the current Title V permit. Associated changes for this renewal are:
  - a. Requirement 4.3.1. of this underlying permit will be incorporated into the renewal permit by citing it in condition 3.4.1.
  - b. Requirement 4.3.7. applies to the scrubber associated with the kiln. Since there are two additional scrubbers (031, 036) at the facility, it is an improvement to specify the scrubber ID after the citation of authority for renewal permit condition 4.2.3.
- III. **45CSR30** *Requirements for Operating Permits*. Changes in permit conditions with 45CSR30 as their underlying authority have been revised, which are:
  - a. **Condition 4.1.12.** The underlying NSR permit did not set the limitation in this condition. The permittee agreed (in technical correspondence received on 12/13/2012) to specifying 45CSR§30-12.7. in the citation to ensure the limitation is enforceable.
  - b. Condition 4.2.2. The first sentence currently reads "At least weekly (except for the Chipper Cyclone 018 and Screening Fabric Filter 023 which shall be done daily), visual emission checks of each emission point subject to an opacity limit shall be conducted." This VE monitoring is also useful to demonstrate compliance with the PM mass rate limits for sources 013, 015, 022, 026, 031, and 036 (permit condition 4.1.6.) and for Silo Vent 2E and Densi Filter 3E (permit condition 4.1.16.). In the current permit, there is no clear means defined for demonstrating compliance with the PM mass rate limits for these sources. In order to make condition 4.2.2 the means of the demonstrating compliance with the PM mass rate limits for these sources, the first sentence of condition 4.2.2 is modified. The current citation of 45CSR§30-5.1.c. is sufficient for this revision. Refer to Section V of this Fact Sheet for a discussion of the CAM citation for sources 018 and 023.
  - c. Conditions 4.2.2.a. and 4.2.2.b. Both conditions mention "normal facility operation". Based upon recent comments received from U.S. EPA concerning such language in other Title V permits, the word "normal" will be removed for this renewal permit. Before making this change, it was verified that the underlying rule (45CSR7) and interpretive rule (45CSR7A) do not specify the word "normal" in this case and also do not provide for startup/shutdown/malfunctions in this situation. Due to these facts, the word "normal" is deleted from the first sentence in both 4.2.2.a. and 4.2.2.b.

#### d. **Condition 4.4.2**.

- i. The reference to the pollutant H<sub>2</sub>S is removed since this pollutant is not listed in condition 4.1.4.
- ii. The pollutants PM<sub>10</sub> and TSP are added to the list in condition 4.4.2. since this condition is also used to demonstrate compliance with these pollutant limits in condition 4.1.4. This is justified since the venturi scrubber controls PM emissions from the kiln. Note that the permittee also requested this additional language in technical correspondence<sup>1</sup>.
- iii. The language in the first sentence of this condition is changed from "Condition 4.1.4" to "conditions 4.1.4., 4.1.5., 4.1.15., and 4.1.16." since the pollutants are the same for both conditions; the only difference between the conditions being 4.1.4 is for combusting natural gas, 4.1.5. is for combusting No. 2 fuel oil, 4.1.15. is for recycled oil, and 4.1.16. is for petroleum coke. Also, since 4.1.16. contains limits for other emission points, the language "for emission point 001" is added to the first sentence in condition 4.4.2. to clarify that the condition applies only to emission point 001.
- iv. There are annual emission limits in conditions 4.1.4., 4.1.5., 4.1.15., and 4.1.16., for which compliance is demonstrated by recordkeeping in condition 4.4.2. The language "Compliance with the annual limitations shall be demonstrated on a 12-month rolling total." has been added to condition 4.4.2. in keeping with U.S. EPA guidance<sup>2</sup> concerning practical enforceability of annual limitations. The permittee agreed to specifying the 12-month rolling total in technical correspondence received on 12/13/2012; therefore, the current citation of 45CSR§30-12.7. is used for this additional specific requirement.
- IV. 40 C.F.R. 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The Auxiliary Gas Drive Motor (Em. Unit ID: 049) is rated at 0.16 mmBtu/hr MDHI, which is equivalent to approximately 63-hp (using the conversion factor 2,546.7 Btu/hr-hp). According to technical correspondence<sup>3</sup> the engine is rated at 45-hp. It was installed in 1966; is located at a major source of HAP; and is used only in emergency situations (to drive the lime kiln during a power outage). Based upon these facts, the engine meets the criteria of §§63.6585(a) and 63.6590(a)(1)(ii), and is thus subject to this regulation. The engine does not meet any of the criteria for being subject to limited requirements under §63.6590(b). Further, this engine does not meet the criteria for being subject to NSPS requirements in §63.6590(c) to fulfill the requirements of this regulation. For this engine, the substantive applicable requirements are found in 40 C.F.R. §63.6602, which refers to Table 2c, Item #6, for existing emergency stationary SI RICE. The requirements pertain to oil changes, spark plug inspections, and inspections of belts and hoses. Table ZZZZ below sets forth a sequential analysis of the regulation and how each section applies (or does not apply) to the engine, and how the applicable requirements are incorporated into the renewal operating permit. Since the facility is a major source of HAPs, 45CSR34 is cited with each permit condition listed in Table ZZZZ (cf. 45CSR§34-4.1.d.).

**Table ZZZZ** 

Section	Condition	Discussion
		Compliance Date
\$63.6595(a)(1)	5.1.1.	The engine is considered "an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions." Therefore, the compliance date is October 19, 2013. Since the compliance date is future at the time of this renewal, all other Subpart ZZZZ permit conditions end with a statement that makes each condition subject to the compliance date.

<sup>&</sup>lt;sup>1</sup> Email dated 5/25/2012 from J. Thomas Martin, Environmental Engineer for the permittee.

<sup>&</sup>lt;sup>2</sup> Title V Permit Writer's Tips – Compliance/Enforcement at <a href="http://www.epa.gov/reg3artd/permitting/t5">http://www.epa.gov/reg3artd/permitting/t5</a> compl. enf.htm accessed 12/17/2012.

<sup>&</sup>lt;sup>3</sup> Email dated 5/25/2012 from J. Thomas Martin, Environmental Engineer for the permittee.

Section	Condition	Discussion
	<u> </u>	Emission and Operating Limitations
§63.6600	None	This section is not applicable since the engine is rated less than 500
		brake HP (bhp).
§63.6601	None	This section is not applicable since the engine is less than 250-bhp.
§63.6602	5.1.2.	This section is applicable since the engine is existing; is rated less than 500 brake HP; and is located at a major source of HAP. This section refers to applicable emissions limitations in Table 2c to Subpart ZZZZ. In Table 2c, the applicable requirements for an emergency SI RICE are given in Item #6. None of the other requirements in Table 2c are applicable to the engine.
		Instead of keeping the reference to \$63.6625(i) for CI RICE, footnote 2 is modified to refer to \$63.6625(j) for SI RICE. The oil analysis program is not limited to CI RICE. This is determined from two facts: (1) In Table 2c, Item #6, the footnote 2 is referenced after the oil change requirement; and (2) \$63.6625(j) sets forth the oil analysis option specifically for SI RICE, which follows the option for CI RICE in \$63.6625(i).
		Note: The applicable requirements of Table 2c, Item #6, are considered "Work Practice Requirements". These are not the same as emission limitations and operating limitations described elsewhere in the regulation. Emission limitations are items such as reduction of carbon monoxide emissions and limiting the concentration of formaldehyde in the exhaust stream (cf. non-applicable Table 2a of the subpart). Operating limitations are items such as maintaining pressure drop across a catalyst, and maintaining exhaust gas temperature in a specified range (cf. non-applicable Table 2b of the subpart). However, work practices pertain to frequencies of oil changes, inspections of spark plugs and belts and hoses. The notes following Table 2c in the regulation affirm that these requirements are work practice requirements. Further, §63.6640(a), Table 6, applicable Item #9, describes the requirements as "work or management practices." Based upon these distinctions, all associated MRR requirements in the regulation that pertain to emission limits and operating limits will not be included in the permit since they are not applicable to the engines.
§63.6603	None	This section is not applicable since the engine is located at a major source.
§63.6604	None	This section is not applicable since the engine is spark ignition, and is an emergency unit, and its site rating is not more than 300 brake HP.
		General Compliance Requirements
§63.6605(a)	None	This section is not applicable since the engine is not subject to emission limitations and operating limitations of Subpart ZZZZ.
§63.6605(b)	5.1.3.	This general duty requirement is included in the permit.
300.0000(0)	-	ting and Initial Compliance Requirements
§63.6610	None	This section is not applicable since the engine is rated less than 500 brake HP.
§63.6611	None	This section is not applicable since the engine is existing.
303.0011	1 10110	This section is not applicable since the engine is existing.

Section	Condition	Discussion
§63.6612	None	This section is applicable since the engine is existing, and rated less than 500 brake HP at a major source. However, no specific requirements in §63.6612 apply to it, as is demonstrated below.
		§63.6612(a) refers to applicable requirements in Table 4 to Subpart ZZZZ. The requirements in Table 4 can apply to SI stationary RICE
		that are complying with the requirement to reduce CO or formaldehyde emissions. However, the engine is not subject to any requirement to reduce CO or formaldehyde emissions; therefore, §63.6612(a) does not apply.
		§63.6612(b) applies in the case when testing has already been performed. This requirement is not applicable to the engines.
§63.6615	None	This section is not applicable since the engine is not subject to emission limitations and operating limitations under Subpart ZZZZ.
§§63.6620(a)	None	This section is not applicable since the engine is not subject to
through (i)		emission limitations and operating limitations under Subpart ZZZZ.
§63.6625(a)	None	This section is not applicable since there is no CEMS for the engine.
§63.6625(b)	None	This section is not applicable since there is no CPMS for the engine.
§63.6625(c)	None	This section is not applicable since the engine does not fire landfill gas or digester gas.
§63.6625(d)	None	This section is not applicable since the engine is an existing SI RICE and is rated less than 250-bhp.
§63.6625(e)	5.1.4.	The engine meets the criteria of §63.6625(e)(2), and is therefore required to comply with this section. The language of both
		§63.6625(e) and §63.6625(e)(2) have been combined for the permit condition. The non-applicable language "or black start" has not been included in the condition.
§63.6625(f)	5.1.5.	The engine meets the criteria of §63.6625(f), and is therefore subject to the requirement. The non-applicable language "or an existing emergency stationary RICE located at an area source of HAP emissions" has not been included in the condition.
§63.6625(g)	None	This section is not applicable since the engine is emergency SI RICE.
§63.6625(h)	5.1.2.	This section is applicable to the engine since it is existing, and will be included in the requirements of condition 5.1.2. Thus, this section is cited along with §63.6602 rather than writing a separate condition.
§63.6625(i)	None	This section is not applicable since the engine is not a CI RICE.
§63.6625(j)	5.1.6.	The oil analysis program is an option mentioned in footnote 2 to Table 2c of Subpart ZZZZ for the applicable work practice standard in Item #6 of Table 2c. The oil analysis program is set forth in a separate permit condition with non-applicable language excluded.
§§63.6630(a) through (c)	None	§63.6630(a) is not applicable since the engine is not subject to emission and operating limitations from Subpart ZZZZ.
		§63.6630(b) is not applicable since the engine is not subject to operating limitations from Subpart ZZZZ.
		The NOCS requirement of §63.6630(c) is not applicable since none of the requirements in §§63.6630(a) through (b) are applicable.

Section	Condition	Discussion
		Continuous Compliance Demonstration
§§63.6635(a)	None	§63.6635(a) is not applicable since the engine is not subject to
through (c)		emission and operating limitations from Subpart ZZZZ.
		§§63.6635(b) and (c) are not applicable since the engine is not subject to any continuous monitoring in Subpart ZZZZ.
§63.6640(a)	5.1.4.	Since the engine is subject to requirements of Table 2c of Subpart
		ZZZZ, this section requires compliance with applicable methods in Table 6 to Subpart ZZZZ. In Table 6, the requirements of Item #9 are applicable to the engine. However, it is the same language as in §63.6625(e). Rather than writing a separate and redundant condition, this section is cited with condition 5.1.4.
§63.6640(b)	5.5.1.	This applicable requirement requires the permittee to report
		deviations from the applicable requirements of Table 2c to Subpart ZZZZ. Non-applicable language in the regulation has not been included in this permit condition. Due to the requirement to report according to §63.6650, a parenthetical reference to the corresponding permit condition has been added at the end of the permit condition.
§63.6640(c)	None	This section is reserved.
§63.6640(d)	None	This section is not applicable since the engine is existing.
§63.6640(e)	5.5.2.	This section requires reporting when an applicable requirement in Table 8 to Subpart ZZZZ is not met. The engine does not meet any of the criteria for exemptions given in this section; therefore, a permit condition has been written.
§63.6640(f)(1)	5.1.7.	This section applies to the engine since it is an existing emergency stationary RICE less than 500 brake HP at a major source.
		The first sentence of §63.6640(f)(1)(iii) is applicable in this case. However, the remaining requirements apply to generators that supply power to the electric grid. The engine 049 is not used for this specific purpose; therefore, the non-applicable language is excluded from condition 5.1.7.(iii).
§63.6640(f)(2)	None	This section is not applicable since the engine is rated less than 500 brake HP.
		Notifications
§63.6645(a)(5)	None	This section provides an exemption to the notification requirements (including the NOCS under 40 C.F.R. §63.9(h)) for an existing stationary emergency RICE. Since the engine meets this criteria, the notifications under §63.6645 do not apply.
§63.6645(b)	None	This section is not applicable since the engine is rated less than 500 brake HP.
§63.6645(c)	None	This section is not applicable since the engine is existing and rated less than 500 brake HP.
§63.6645(d)	None	This section is not applicable since an initial notification is not required. Requirements for initial notification are in §63.9(b), which is not applicable, in accordance with the determination regarding §63.6645(a)(5).
§63.6645(e)	None	This section is not applicable since the engine is existing.
§63.6645(f)	None	This section is not applicable since an initial notification is not required.

Section	Condition	Discussion
§§63.6645(g)	None	These sections are not applicable to the engine since no performance
and (h)		tests under Subpart ZZZZ are required.
	•	Reporting
§§63.6650(a)	None	These sections are not applicable to the engine since it meets none of
and (b)		the criteria in Table 7 to Subpart ZZZZ. In particular, each engine
		type in Table 7 are non-emergency. The permittee's engine is
		emergency type.
§63.6650(c)	None	This section is not applicable since it pertains to Compliance
		Reports, which are not required for the engines since they meet none
		of the criteria in Table 7 to Subpart ZZZZ (cf. §63.6650(a)).
§63.6650(d)	None	This section is not applicable since it pertains to Compliance
		Reports, which are not required for the engine since it meets none of
		the criteria in Table 7 to Subpart ZZZZ (cf. §63.6650(a)).
		Furthermore, this section is not applicable since the engine is not
	1	subject to emissions and operating limitations from Subpart ZZZZ.
§63.6650(e)	None	This section is not applicable since the engine is not subject to
0.50.5550.00	7.7.0	emissions and operating limitations from Subpart ZZZZ.
§63.6650(f)	5.5.3.	This section is an applicable requirement to report deviations (as
		defined in 40 C.F.R. §63.6675). This requirement is modified for
862 6650(g)	None	coherence in the renewal permit.
§63.6650(g)	None	This section is not applicable since the engine is existing and does not fire landfill gas or digester gas.
		Recordkeeping
862 6655(a)	None	This section does not apply since the engine is not subject to
§63.6655(a)	None	emission and operating limitations.
§63.6655(b)	None	This section does not apply since neither CEMS nor CPMS are
§03.0033(b)	None	employed for the engine.
§63.6655(c)	None	This section is not applicable since the engine is existing and does
303.0033(c)	rvone	not fire landfill gas or digester gas.
§63.6655(d)	None	This section does not apply since the engine is not subject to
3 (-)	1	emission and operating limitations.
§63.6655(e)	5.4.1.	This section requires demonstration of continuous compliance using
,		recordkeeping of the information required by §63.6625(e) and
		§63.6625(e)(2). The engine is existing stationary emergency RICE;
		therefore, it meets the criteria of §63.6655(e)(2). Hence, this
		recordkeeping requirement has been written in the permit. The
		regulation language "any of the following stationary RICE" in the
		last sentence has been replaced with the applicable language "an
		existing stationary emergency RICE."
§63.6655(f)	5.4.2.	The engine meets the criteria of §63.6655(f)(1); therefore, this
		section is applicable. The language of both §63.6655(f) and
		§63.6655(f)(1) have been combined to create one coherent and
862 6660(-)	5.4.2	applicable condition.
§63.6660(a),	5.4.3.	These applicable requirements have been written in the permit.
(b), and (c)		Concred Drawiniana
862 6665	510	General Provisions  The engine does not meet any of the exemption evitoric of this
§63.6665	5.1.8.	The engine does not meet any of the exemption criteria of this section. A condition has been written that will IBR the applicable
		requirements of Table 8 to Subpart ZZZZ.
		requirements of Table 6 to Subpart LLLL.

V. **40 C.F.R. Part 64** *Compliance Assurance Monitoring* (CAM). The following tables analyze emission units that have associated control devices to determine CAM applicability (Table 64A) and non-applicability (Table 64B). Emission units at the facility without a control device are not examined since CAM cannot apply to such sources (cf. §64.2(a)(2)). The citation of 45CSR§30-5.1.c. is included with all CAM permit conditions.

Table 64A -Applicability & CAM Plans for 018 Chipper & 023 Screen House.

Em. Unit ID	Control	Discussion	
&	Device ID	Discussion	
Description	(Pollutant)		
		TD1 C 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
018	018	The following criteria characterize the	
Chipper	(TSP,	•	limit of 50-lb/hr (cond. 4.1.6.),
	$PM_{10}$ )	which meets the applicability	criterion at §64.2(a)(1).
		<ul> <li>Chipper cyclone 018 controls</li> </ul>	s PM from the Chipper 018 to
		meet the limitation, which me	ets the applicability criterion at
		§64.2(a)(2).	
		<ul> <li>Pre-control PTE of PM i</li> </ul>	s 219-tpy (per the renewal
		application), which meets	the applicability criterion at
		§64.2(a)(3).	
		The Fact Sheet for the 2007 rener	wal permit included a CAM
		applicability discussion and CAM Plan	_
		PM limits for the Chipper Cyclone 0	• •
		023. However, CAM requirements and	-
		incorporated into the 2007 Title V perr	· ·
		2007 Fact Sheet (given below) lists	_
		CAM monitoring elements. Below the	
		CAM plan element and how it is integr	ated into this renewal permit.
		CAM Plan Element	Indicator
		I. Indicator	Particulate Matter limit (4.1.6.)
			See discussion below detailing
			that "No visible emissions" is the indicator.
		Measurement Approach	Observation for visible emissions
			- (4.2.2.)
		II. Indicator Range	Any visible emissions (4.2.2.)
		III. Performance Criteria	
		A Data Panrasantativanasa	Method 22 observations by a
		A. Data Representativeness	trained operator (4.2.2.)
		B. Verification of	Does not apply to existing non-
		Operational Status	modified monitoring equipment.
		C. QA/QC Practices and	Visible Emissions observed by
		Criteria	Method 22 and/or as outlined in 45 CSR §§ 7A-2.1.a, b - (4.2.2.)
		D. Monitoring Frequency	At least daily - (4.2.2.)
		Data Collection	Visible Emission Observation
		Procedures	Forms- (4.2.2.)
		Averaging Period	Daily - (4.2.2.). See discussion
			below detailing why an averaging period is not applicable in this
			case.
		<i>Indicator</i> . The permittee's table sugg	rests that the PM limit be the
		indicator. The PM limit is the emissio	
		plan provides a reasonable assurance	
		pian provides a reasonable assurance	of offgoing compitance. The

Em. Unit ID	Control	Discussion
&	Device ID	
Description	(Pollutant)	
		indicator is not the limit; rather, it is the monitored parameter, which in this case is visible emissions. Visible emissions is an appropriate indicator for providing a reasonable assurance of compliance with the PM limit. This indicator meets the criteria of §64.3(a)(1).
		Measurement Approach. Daily visible emissions (VE) monitoring and recordkeeping (both in condition 4.2.2.) are contained in the current operating permit, and have been carried over to this renewal permit.
		Indicator Range. The indicator range is "Any visible emissions." This means that no visible emissions provides a reasonable assurance of ongoing compliance with the limit. This range meets the criteria of §§64.3(a)(1) through (3).
		Data Representativeness. Method 22 observations performed by a trained person provides for obtaining data that is representative of the parameter being monitored in accordance with §64.3(b)(1).
		Verification of Operational Status. Since the equipment in this case is not new and has not been modified, verification procedures are not required pursuant to §64.3(b)(2).
		QA/QC Practices & Criteria. Visible Emissions observed by a trained observer using Method 22 and/or as outlined in 45CSR§§7A-2.1.a. and b. are adequate to ensure continuing validity of the data in accordance with §64.3(b)(3).
		Monitoring Frequency. Post-control device PTEs are 50.92 tpy and 40.73 tpy for the 018 Chipper and 023 Screen House, respectively. Since the PTEs are less than 100-tpy, monitoring must be conducted at least once per day in accordance with §64.3(b)(4)(iii). Permit condition 4.2.2. already specifies daily VE checks for emission points 018 and 023. Therefore, this CAM requirement §64.3(b)(4) will be met using the monitoring in condition 4.2.2., and specifically that in 4.2.2.a.
		Data Collection Procedures. At least daily, Method 22 observations will be performed by a trained observer.
		Averaging Periods. In the case of "no VEs", averaging readings of zero opacity (under normal circumstances) does not provide a meaningful value. For this case of "no VEs", there will be no averaging period specified in the renewal operating permit.
		There are other CAM requirements that are incorporated into the operating permit, which are:
		Excursion Definitions. In technical correspondence (5/25/2012 email) the permittee suggested an excursion be defined as an opacity reading greater than 20%. Refer to permit condition 4.2.9. and 4.2.10. for the

Em. Unit ID	Control	Discussion
&	Device ID	
Description	(Pollutant)	
		018 Chipper and 023 Screen House, respectively. While the definition is the same for both units, separate permit conditions are written to keep the emission units separate, and in case of future modification of the excursion definition.
		QIP Threshold. This element is not required for initial implementation of a CAM Plan. Nevertheless, the permittee has chosen to set a QIP threshold in accordance with §64.8(a). In technical correspondence (7/6/2012 email) the permittee suggested a QIP threshold of "No more than six excursions during a six-month reporting period using procedures outlined in 45CSR§§7A-2.1.a., b." Refer to permit conditions 4.2.11. and 4.2.12. for the QIP threshold. While the definition is the same for both units, separate permit conditions are written to keep the emission units separate; for potential future modification of each QIP threshold; and to clearly indicate that there are six excursions for 018 and six excursions for 023 (as of the issuance of this renewal permit). The requirements of §§64.8(b) through (e) will only become effective when and if a QIP is required by either the Administrator or Director; therefore, these are not specifically included in the renewal permit. Note, however, that they are referenced in the next to last sentence in conditions 4.2.11. and 4.2.12.
		Obligation to conduct monitoring. Applicable requirements in §64.7 are included. These "boilerplate" CAM requirements will be included in the permit as conditions 4.2.4. through 4.2.8.
		Reporting and Recordkeeping Requirements. Applicable requirements in §64.9 are included. These "boilerplate" CAM requirements will be included in the permit as conditions 4.4.15. and 4.5.5.
023 Screen House	023 (TSP, PM <sub>10</sub> )	The source is subject to a PM limit of 50-lb/hr (cond. 4.1.6.). Screening Fabric Filter 023 controls PM from Screen House 023. Pre-control PTE of PM is 219-tpy (per the application and 7/6/2012 technical correspondence).
		The determinations for the 023 Screen House utilize the same rationale, CAM Plan, excursion definition, QIP threshold, and recordkeeping and reporting as for the Chipper 018 and Chipper Cyclone 018 already described.

Table 64B – Non-applicability of CAM to other sources

Em. Unit ID &	Control	Discussion
Description	Device ID	
	(Pollutant)	
001	001	The Rotary Lime Kiln inherently scrubs SO <sub>2</sub> from the exhaust
Kiln	$(SO_2)$	due to the use of limestone in the process. This is considered
		inherent process equipment, and is therefore not a control
		device, as both terms are defined in §64.1. Therefore, CAM is
		not applicable to emissions of SO <sub>2</sub> from the Kiln 001.

Em. Unit ID &	Control	Discussion
Description	Device ID	Discussion
Description	(Pollutant)	
001	001	The Rotary Lime Kiln is subject to a PM limit (cond. 4.1.4.,
Kiln	(PM)	4.1.5., 4.1.15., and 4.1.16.). The kiln uses a control device
	(= =:=)	(venturi scrubber) to achieve compliance with the PM limit. The
		kiln has potential pre-control device PM emissions greater than
		100-tpy. Thus, all applicability criteria §§64.2(a)(1) through (3)
		are met.
		However, the source is subject to a NESHAPs-MACT
		particulate matter limit in 40 C.F.R. 63 Subpart MM (Pulp and
		Paper Production). In particular, 40 C.F.R. §63.862(a)(i)(C) is
		applicable, and is set forth as condition 4.1.11. in the current permit, and is written in the renewal operating permit. This is an
		emission limitation proposed by the Administrator after
		November 15, 1990 pursuant to section 111 or 112 of the Act.
		Therefore, the source meets the exemption at 40 C.F.R.
		§64.2(b)(1)(i) for particulate matter.
		-
		CAM is not applicable to emissions of PM from the Kiln 001.
024	024	The Sawdust Building pre-control PTE is 1.26-tpy; therefore,
Sawdust	$(TSP, PM_{10})$	the criterion at §64.2(a)(3) is not met and CAM is not
Building	007	applicable.
025	025	The Sawdust Loading pre-control PTE is 1.26-tpy; therefore, the
Sawdust Loading	$(TSP, PM_{10})$	criterion at §64.2(a)(3) is not met and CAM is not applicable.
026	026	The source is subject to a PM limit of 18.4-lb/hr (cond. 4.1.6.).
Rechipper	(TSP, PM <sub>10</sub> )	Rechipper cyclone 026 controls PM from the Rechipper 026.
recompper	(121,11110)	However, pre-control PTE of PM is 80.59-tpy (per the
		application and 7/6/2012 technical correspondence). Since the
		criterion at §64.2(a)(3) is not met, CAM is not applicable to this
		pollutant emitted by this source.
031	031	The source is subject to a PM limit of 6.73-lb/hr (cond. 4.1.6.).
No. 16 Lime	$(TSP, PM_{10})$	No. 16 Slaker Scrubber controls PM from the source.
Slaker		However, pre-control PTE of PM is 29.9-tpy (per the application
		and 7/6/2012 technical correspondence). Since the criterion at
		§64.2(a)(3) is not met, CAM is not applicable to this pollutant emitted by this source.
036	036	The source is subject to a PM limit of 6.73-lb/hr (cond. 4.1.6.).
No. 6 Lime	(TSP, PM <sub>10</sub> )	No. 6 Slaker Scrubber controls PM from the source.
Slaker	(,	However, pre-control PTE of PM is 29.9-tpy (per the application
		and 7/6/2012 technical correspondence). Since the criterion at
		§64.2(a)(3) is not met, CAM is not applicable to this pollutant
		emitted by this source.
045	045	The No. 16 Slaker Feeder is not subject to an emission
No. 16 Slaker	$(TSP, PM_{10})$	limitation. The criterion at §64.2(a)(1) is not met. CAM is not
Feeder	0.1.5	applicable to this pollutant emitted by this source.
046	046	The No. 6 Slaker Feeder Enclosure is not subject to an emission
No. 6 Slaker Feeder	$(TSP, PM_{10})$	limitation. The criterion at §64.2(a)(1) is not met. CAM is not applicable to this pollutant amitted by this source.
recuel		applicable to this pollutant emitted by this source.

Em. Unit ID &	Control	Discussion
Description	Device ID	
	(Pollutant)	
047	047	Limestone Unloading is not subject to an emission limitation.
Limestone	$(TSP, PM_{10})$	The criterion at §64.2(a)(1) is not met. CAM is not applicable to
Unloading		this pollutant emitted by this source.
048	048	Pebble Lime Unloading is not subject to an emission limitation.
Pebble Lime	$(TSP, PM_{10})$	The criterion at §64.2(a)(1) is not met. CAM is not applicable to
Unloading		this pollutant emitted by this source.
Silo 2S	2C	Pre-control TSP emissions are 20 tpy, which is less than the
	$(TSP, PM_{10})$	major source threshold for PM. Since the criterion at §64.2(a)(3)
		is not met, CAM is not applicable to this pollutant emitted by
		this source.
Densi-flow	3C	Pre-control TSP emissions are 10 tpy, which is less than the
Delivery	$(TSP, PM_{10})$	major source threshold for PM. Since the criterion at §64.2(a)(3)
System 3S		is not met, CAM is not applicable to this pollutant emitted by
		this source.

VI. Emission Units Table Changes. The emission units table included in the renewal application (Attachment D) was compared with the emission units table in the current operating permit. Several changes have been identified for renewal permit subsection 1.1., which are described in the table below.

Em. Unit ID	Description of Change
031, 036	Changed design capacity from "16.25 TPH" to "16.17 TPH".
029, 030, 032, 033, 034, 035, 037 through 044, 049, 054, 058, 060, 061	These sources are added to the emission units table. Source 049 is the Auxiliary Gas Drive Motor, and source 054 is Cotton Roll Grinding. Sources 039 and 040 are vacuum pumps. All of the remaining sources are tanks of various capacities containing fluids used at the facility.

#### VII. Miscellaneous Changes

- a. **45CSR6** *To Prevent and Control Air Pollution from Combustion of Refuse*. The language of permit conditions 3.1.1. and 3.1.2. was revised to reflect the current rule language.
- b. The citation of authority is revised in condition 3.1.9. to specify the underlying permit requirement 2.5.1. The current operating permit does not cite the condition number in the underlying permit.
- c. **Stack Testing Requirements.** DAQ updated the Title V permit boilerplate with a new addition to section 3.3.1. Condition 3.3.1.d. was added along with a change in the citation.
- d. **Annual Compliance Certification Submittal.** U.S. EPA has instructed DAQ that permittees are to submit their annual compliance certification to U.S. EPA via e-mail only (*i.e.*, no paper "hard copies" to U.S. EPA). The conditions 3.5.3. and 3.5.5. have been modified to provide for this new stipulation.
- e. **U.S. EPA Address Change**. The address in condition 3.5.3. is changed from "Office of Enforcement and Permits Review (3AP12)" to "Office of Air Enforcement and Compliance Assistance (3AP20)".

f. The word "section" is changed to "condition" for better coherence in condition 4.4.7.

### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. **40 C.F.R. 60 Subpart BB -** *Standards of Performance for Kraft Pulp Mills*. The Lime Kiln was installed in 1966. It has not been modified since. Since it was not constructed or modified after September 24, 1976, it is not subject to the requirements of this subpart in accordance with §60.280(b).
- b. **45CSR27 -** *To Prevent and Control the Emissions of Toxic Air Pollutants*. The total amounts of toxic air pollutants estimated to be emitted from the West Virginia operations are as follows: benzene 626 lb/yr (threshold 1,000 lb/yr); chloroform -888 lb/yr (threshold 1,000 lb/yr); formaldehyde 820 lb/yr (threshold 1,000 lb/yr); Methylene chloride 32 lb/yr (threshold 5,000 lb/yr). Since the estimated emission rates of all toxic air pollutants are below the respective emission thresholds, the regulations in 45CSR27 are not applicable.
- c. Condition 4.2.1. in Permit R13-0511C. Compliance stack testing was required within 180 days of first use of pet coke as a fuel for the lime kiln. According to a May 25, 2012 email from the permittee, the testing was performed on March 25, 2009. The requirement has been fulfilled, and there are no ongoing requirements; therefore, the condition is no longer applicable.
- d. 40 C.F.R. 60 Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Tanks 029, 030, 032, 033, 034, 035, 037, 038, and 058, were constructed in 1966 and have not been reconstructed or modified; therefore, this regulation is not applicable to these tanks.
- e. **40** C.F.R. **60** Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. This regulation applies to affected facilities listed in 40 C.F.R. §60.670(a)(1) located at nonmetallic mineral processing plants. 40 C.F.R. §60.671 defines a *nonmetallic mineral processing plant* as "any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located...." The permittee utilizes the *nonmetallic mineral* limestone in its Beryl facility operations. However, according to technical correspondence (5/25/2012 email), the permittee does not crush or grind limestone at the Beryl facility. Therefore, the Beryl facility does not meet the definition of a *nonmetallic mineral processing plant* in 40 C.F.R. §60.671 and therefore this regulation does not apply.
- f. **Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule**. The facility has not made any changes that trigger a PSD modification; therefore, the requirements of the GHG tailoring rule are non-applicable.

# **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: December 27, 2012 Ending Date: January 28, 2013

All written comments should be addressed to the following individual and office:

Denton B. McDerment, PE Title V Permit Writer West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304

# **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Point of Contact**

Denton B. McDerment, PE West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304

Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478

# **Response to Comments (Statement of Basis)**

No comments were received from the public, which includes the permittee. No comments were received from U.S. EPA.